UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MACK J. SCHERMER, ROGER D. DOWD, and JUN YANG

Appeal No. 2004-1963
Application No. 09/354,500

ON BRIEF

Before PAK, DELMENDO, and JEFFREY T. SMITH, *Administrative Patent Judges*.

PAK, *Administrative Patent Judge*.

REMAND TO THE EXAMINER

This case is not ripe for meaningful review and is, therefore, remanded to the examiner for appropriate action consistent with the views expressed below.

Claim 10, the broadest claim on appeal, reads as follows:

> 10. A system for automatically creating crosstalk-corrected data of a microarray wherein crosstalk is caused by overlapping dye emission spectra, the system comprising:
>
> a microarray substrate having three or more calibration dye spots, each of the calibration dye spots comprising a single pure dye;

> an imager having a plurality of output channels wherein for each of the calibration dye spots the imager generates a dye image containing at least one of the calibration dye spots for each of the output channels;
>
> means for measuring an output of each of the output channels for each of the calibration dye spots to obtain output measurements;
>
> means for computing a set of correction factors from the output measurements; and
>
> means for applying the set of correction factors to quantitation data obtained from the generated microarray images containing spots having three or more dyes with excitation or emission spectra to obtain crosstalk-corrected data.

The examiner has rejected the claims on appeal, including claim 10, under 35 U.S.C. § 103 as unpatentable over the combined teachings of prior art references. See the Anser, page 3. Specifically, the examiner sets forth the following rejection:

> Claims 1-18 are rejected under 35 U.S.C. [§] 103(a) as being unpatentable over Trulson et al. (U.S. Patent No. 5,578,832) or Brown et al. (U.S. Patent No. 5,807,522) in view of Ginestet (U.S. Patent No. 6,225,636).

This rejection, however, fails to take into consideration the means-plus-function limitations recited in claim 10. *See In re Donaldson*, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994)(*in banc*)(When the term in a claim is written in a "means-plus-function" format, it must be interpreted as being limited to the corresponding structure described in the specification and

equivalents thereof in accordance with the requirements of 35 U.S.C. § 112, paragraph 6). The examiner does not refer to any structures described in the specification supposedly corresponding to the "means for measuring . . . , " "means for computing . . . " and/or "means for applying . . . " recited in claim 10. See the Answer in its entirety. The examiner also does not indicate whether the applied prior art references teach or would have suggested such corresponding structures or equivalents thereof.

As stated in *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424, 43 USPQ2d 1896, 1899-00 (Fed. Cir. 1997),

> [the] structure disclosed in the specification is "corresponding" structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim[s]. This duty to link or associate structure to function is the *quid pro quo* for the convenience of employing § 112, 6.

In other words, "the corresponding structure(s) of a means-plus-function limitation must be disclosed in the written description in such a manner that one skilled in the art will know and understand what structure corresponds to the means limitation." *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1382, 53 USPQ2d 1225, 1230 (Fed. Cir. 1999). Failure to do so would violate the particularity requirement of 35 U.S.C. § 112,

second paragraph. *Atmel Corp v. Information Storage Devices, Inc., supra.*

The structures equivalent to the corresponding structure described in the specification include those which

1) perform substantially the same function in substantially the same way to produce substantially the same results, *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1267, 51 USPQ2d 1225, 1229-30 (Fed. Cir. 1999);

2) have insubstantial differences, *Valmount Indus. Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1042-44, 25 USPQ2d 1451, 1453-56 (Fed. Cir. 1993);

3) are structurally equivalent, *In re Bond*, 910 F.2d 831, 833, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990); and

4) a person having ordinary skill in the art would have recognized as interchangeable, *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1316, 50 USPQ2d 1161, 1165 (Fed. Cir. 1999).

Thus, upon return of this application, the examiner is to determine whether the structures corresponding to the claimed means-plus-function limitations are adequately described in the

specification within the meaning of 35 U.S.C. § 112, second paragraph. If they are adequately described, the examiner must determine whether the applied prior art references or any other references would have taught or suggested either the corresponding structures described in the specification or equivalents thereof. This analysis, of course, would require defining the corresponding structure of the claimed means-plus-function limitations described in the specification.

We also note appellants' reference to 56 patents in the context of the term "quantitation data" used in claims 1 and 10 at page 6 of the Brief. The examiner is advised to review those patents to properly interpret the term in question and indicate which of these patents supports the examiner's position.

This remand to the examiner pursuant to 37 CFR § 41.50(a)(1) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)) is made for further consideration of a rejection. Accordingly, 37 CFR § 41.50(a)(2) applies if a supplemental examiner's answer is written in response to this remand by the Board.

REMANDED

CHUNG K. PAK)
Administrative Patent Judge)
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ROMULO H. DELMENDO) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND
) INTERFERENCES
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JEFFREY T. SMITH)
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CKP:hh

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